Information Services Board Briefing Paper on Geographic Information Technology (GIT) Subcommittee proposed Technical Standards for GIT

Prepared by Jeff Holm, DIS/MOSTD, (360) 902-3447.

Description

At the request of the Information Services Board (ISB) Geographic Information Technology Subcommittee Chair, the subcommittee will present its endorsement of the proposed GIT Technical Standards for adoption by the ISB.

Background

The Information Services Board (ISB) and the Washington State Geographic Information Council (WAGIC) have strategic and technical interests in promoting better government through a coordinated, enterprise approach to collaboratively developed spatial data management solutions. Policy and standards play a fundamental role in effective data management and integration.

This briefing provides a description of the iterative process for development and maintenance of policy and standards as they relate to geographic information technology (GIT). This process will, over time, lead to useful geospatial technical standards and policy in support of ISB and WAGIC objectives. The process described here is an integrated adjunct to the ISB's formal process for establishing IT policy and standards. (See attached process diagram)

Policy and standards resulting from this process are intended to support the following objectives:

- Coordinate geographic information management statewide
- Promote geographic information as a critical information asset
- Promote partnerships and collaboration to develop and use geographic information
- Enable access to geographic data and support data sharing
- Improve data quality
- Reduce redundant data collection

Conceptual guidelines for development of Washington state GIT Policy & Standards include:

- Adopt national standards where appropriate
- Be consistent/cognizant of related RCW standards or rules
- Use implementations that both add value and reflect operating challenges

GIT policy and standards will be developed using a phased approach. Initial efforts are focused on formalizing selected work accomplished through various WAGIC initiatives. The intent is to draw upon recognized WAGIC and collaborative standards processes that have resulted in published or documented results.

Phase One will focus on common standards for: geodata documentation (metadata), horizontal datum, and coordinate system. Subsequent phases will address content standards for fundamental framework geodata themes and geodata transfer and access mechanisms.

Phase One Technical Standards will address the following three areas that are important to geodata stewardship and integration:

1. **METADATA** - Standardized descriptions of significant geodata holdings that describe and document key aspects or characteristics of the data. Example elements include: title, description, purpose, source data lineage, method of construction, contact information.

The objective of this standard is to protect agencies' investment in significant geodata holdings through standardized geo-dataset documentation, and where appropriate, facilitate data reuse and data discovery.

Metadata serves a number of data management and stewardship functions:

- Helps manage data redundancies
- Protects organizations' investments and institutional memories
- Addresses reuse and fitness of use questions
- Enables data discovery

Determining and reflecting location is a fundamental value of GIT. Adoption of a standard Datum and Coordinate System provides a foundation for data integration and error reduction.

- 2. **Standard COORDINATE SYSTEM** Adopt a common coordinate system to reference any particular point located within the state
- 3. **Standard DATUM** Registering coordinate system to common point(s) on earth surface.

Geodata holdings that are built on common technical standards of registration and reference:

- Facilitate emergent data exchange for key datasets
- Are easier to integrate and use on-the-fly
- Support 'apple to apple' comparisons and analysis
- Minimize data content distortions brought on by multiple re- projections/resampling

Status

At the January 30, 2003 ISB/GIT subcommittee meeting, subcommittee members will consider endorsement of the proposed standards

Issues

Agencies may need guidance and training to implement the proposed standards and will need time to implement standards for their significant geo-datasets. The WAGIC Technical Standards Workgroup will develop, in concert with appropriate vendors, migration/re-projection strategies and training support.

Recommendations

DIS recommends adoption of proposed process and Phase One Technical Standards as endorsed by ISB/GIT Subcommittee. This briefing paper is provided in anticipation of presenting the subcommittee's endorsed standards to the full ISB for adoption at the February 6th meeting

Information Services Board February 6, 2003

ver 1 ISB-GIT / WAGIC Technical Standards Process

